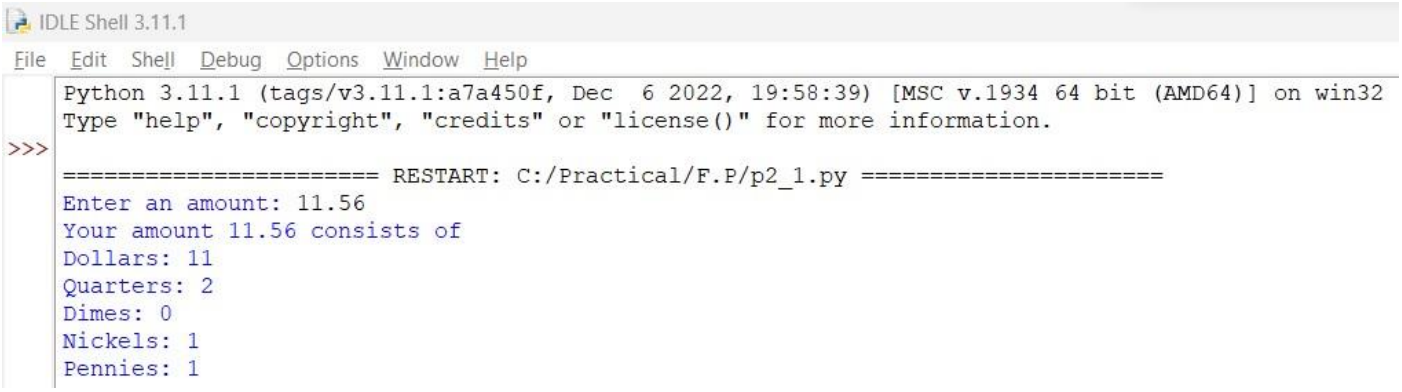
Practical-2

AIM1: You are developing a program that classifies a given amount of money into smaller monetary units. The program lets the user enter an amount representing a total in dollars and cents, and then outputs a report listing the monetary equivalent in dollars, quarters, dimes, nickels, and pennies, as shown in the sample run.

Code:

```
amount = float(input("Enter an amount: "))

print("Your amount {} consists of".format(amount))

dollars = int(amount)

remaining_cents = int(round(amount * 100)) % 100

quarters = remaining_cents // 25

dimes = remaining_cents % 25 // 10

nickels = remaining_cents % 25 % 10 // 5

pennies = remaining_cents % 25 % 10 % 5

print("Dollars:", dollars)

print("Quarters:", quarters)

print("Dimes:", dimes)

print("Nickels:", nickels)

print("Pennies:", pennies)
```

Output:



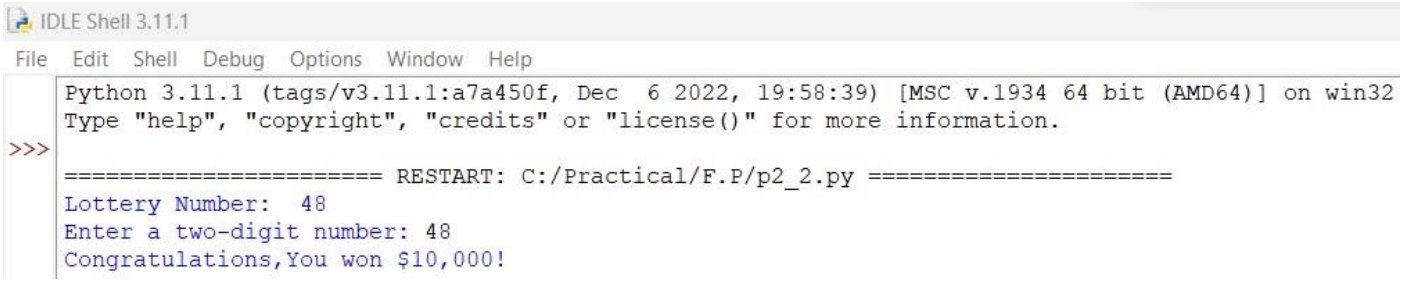
AIM2: Suppose you want to develop a program to play a lottery.

Code:

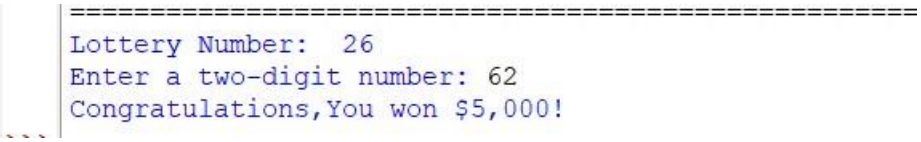
```
import random

lottery = random.randint(10, 99)

print("Lottery Number: ", lottery)

a = int(input('Enter a two-digit number: '))

b_str = str(lottery)

a_str = str(a)

if b_str == a_str:

 print('Congratulations,You won $10,000!')

elif b_str[0] == a_str[1] and b_str[1] == a_str[0]:

 print('Congratulations,You won $5,000!')

elif b_str[0] in a_str or b_str[1] in a_str:

 print('Congratulations,You won $2,000!')

else:

 print('Sorry, you did not win the lottery this time.')
```

Output:

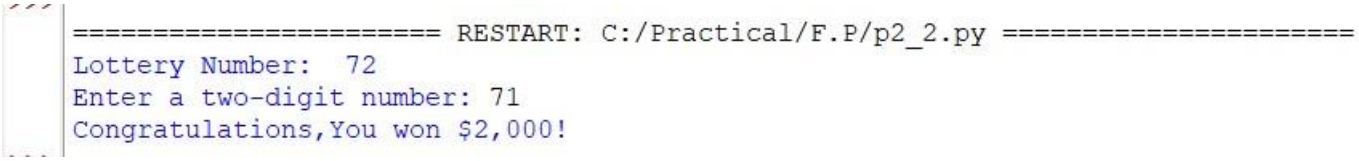
A).



B).



C).



AIM3: Guessing Numbers: The problem is to guess what number a computer has in mind.

Code:

```
import random

number = random.randint(0, 100)

guess = int(input("Guess a magic number between 0 and 100: "))

while guess != number:

   if guess < number:

      print("Too low")

   else:

      print("Too high")

   guess = int(input("Enter your guess: "))

print("Yes, the number is:", number)
```

Output: